

and

a patterned layer formed on the second surface of the first substrate,

wherein the patterned layer includes a plurality of grooves formed through the patterned layer to expose portions of the second surface of the first substrate.

5. (Amended) A flat luminescence lamp, comprising:

a first substrate having a first surface and a second surface;

a patterned layer formed on the second surface of the first substrate;

a plurality of grooves formed through the patterned layer exposing portions of the second surface of the first substrate;

a second substrate having a first surface and a second surface, the first surface of the first substrate opposing the first surface of the second substrate;

a plurality of first electrodes formed on the first surface of the first substrate;

a plurality of second electrodes formed on the first surface of the second substrate opposing the first electrodes;

a first fluorescent material layer formed on the first surface of the first substrate;

a second fluorescent material layer formed on the first surface of the second substrate opposing the first fluorescent material layer; and

a plurality of frame portions formed on the first surface of the first substrate and the first surface of the second substrate to seal the first substrate and the second substrate.

Please add the following new claim.

21. (New) A flat luminescence lamp, comprising:

a first substrate having a first surface and a second surface;

a patterned layer formed on the second surface of the first substrate;

a plurality of grooves formed through the patterned layer exposing portions of the second surface of the first substrate;

an insulating layer formed on the first surface of the first substrate;

a second substrate having a first surface and a second surface, the first surface of the first substrate opposing the first surface of the second substrate;

a plurality of first electrodes formed on portions of the insulating layer;

a plurality of second electrodes formed on the first surface of the second substrate opposing the first electrodes;

a first fluorescent material layer formed on the first surface of the first substrate;

a second fluorescent material layer formed on the first surface of the second substrate opposing the first fluorescent material layer; and

a plurality of frame portions formed on the first surface of the first substrate and the first surface of the second substrate to seal the first substrate and the second substrate.